## Amendments to the Specification:

## Please replace the second paragraph on page 1, line 18, with the following:

"The present invention relates to a high speed rotational fixture assembly that has been designed to enable high yield production of thin film based demul[[i]]tiplexers for DWDM(Dense Wavelength Division Multiplexer) systems. The fixture utilizes a dedicated thin film thickness monitor and shutter to a allow individual thickness control of coatings on substrates positioned at various locations in a vacuum deposition system. The individual control compensates for variations in deposition rate, which are inherent in all deposition processes used to produce filters for high quality optics and telecommunication hardware components. Proper implementation of such fixtures should enable production yields of narrow band pass filters to improve significantly over yields currently achieved by conventional tooling."

## Please replace the second paragraph beginning on page 3, line 5, with the following:

"In practice, tens of substrates (approximately 6 inch square or round) are coated with multilayered filters, designed for DWDM in "traditional" IBSD (ion beam sputter deposition) or IAD (ion-assisted deposition) systems. A typical IAD production coating system 22 is approximated by a 60 inch cube, with a fixture assembly 16 located at the top of the vacuum chamber 10 opposite the electron beam evaporator 14 and the ion source 12 as shown schematically in Figure 1A and Figure 1B FIGURE 1. The planetary fixture assembly 16 is designed for thickness uniformity described above and can accommodate approximately 24 6 inch square substrates 18 on rotating holders 30. As

many as 5 QCM (quartz crystal monitor) <u>20</u> and optical monitor, are positioned about the chamber to monitor deposition rate and optical layer thickness. The quartz monitors <u>20</u> are calibrated prior to production. Deposition rate incident on the substrate assembly is determined by sampling each monitor and averaging."

Please replace the last paragraph on beginning on page 10, line 24, with the following:

"As shown in FIGURES 4 and 5, the fixtures 30 are independent of one another, and can be in both an open 42 and closed 40 position. The fixtures 30 are rotatable independently on one another and are also shuttered independently on one another. The independent nature of each of the fixtures 30 allows uniform deposition of the material onto the substrates 18. A vacuum chamber 10 having an ion source 12 a source deposition locator 46 having a movable track 50 capable of moving the electron beam evaporator 14 to a standby position 48 is also shown in Figure 5."